

Typical Applications

Base Station
Synthesizer
Switching
Test Equipment

Features

AT-Cut Crystal
Standard Package



Frequency range

10 MHz – 40 MHz

Standard frequencies

19.44 MHz, 38.88 MHz

Frequency stabilities

Parameter	Frequency stability	Operating temp range
vs. operating temperature range	$< \pm 200$ ppb	-20 ... +70°C
Parameter	Value	Condition
Initial tolerance	$< \pm 500$ ppb	@ $V_C = 2.5$ V
vs. supply voltage change	$< \pm 20$ ppb	static
vs. load change	$< \pm 20$ ppb	static
vs. aging /1 ST year	$< \pm 500$ ppb	after 30 days
vs. aging /10 years	$< \pm 3$ ppm	

Frequency tuning

Parameter	Value	Condition
Electrical Frequency Control (EFC)	$> \pm 8$ ppm	
Voltage range (V_C)	0.5V to 4.5V	
Pulling slope	positive	
Linearity	$< 10\%$	
Frequency control input impedance	> 100 kOhm	

RF output

Parameter	Value	Condition
Signal	HCMOS	
Load	15pF $\pm 5\%$	
Rise and Fall time	< 4 ns	@ 15pF & 10 to 90%
Duty cycle	40/60%	@ $V_S/2$

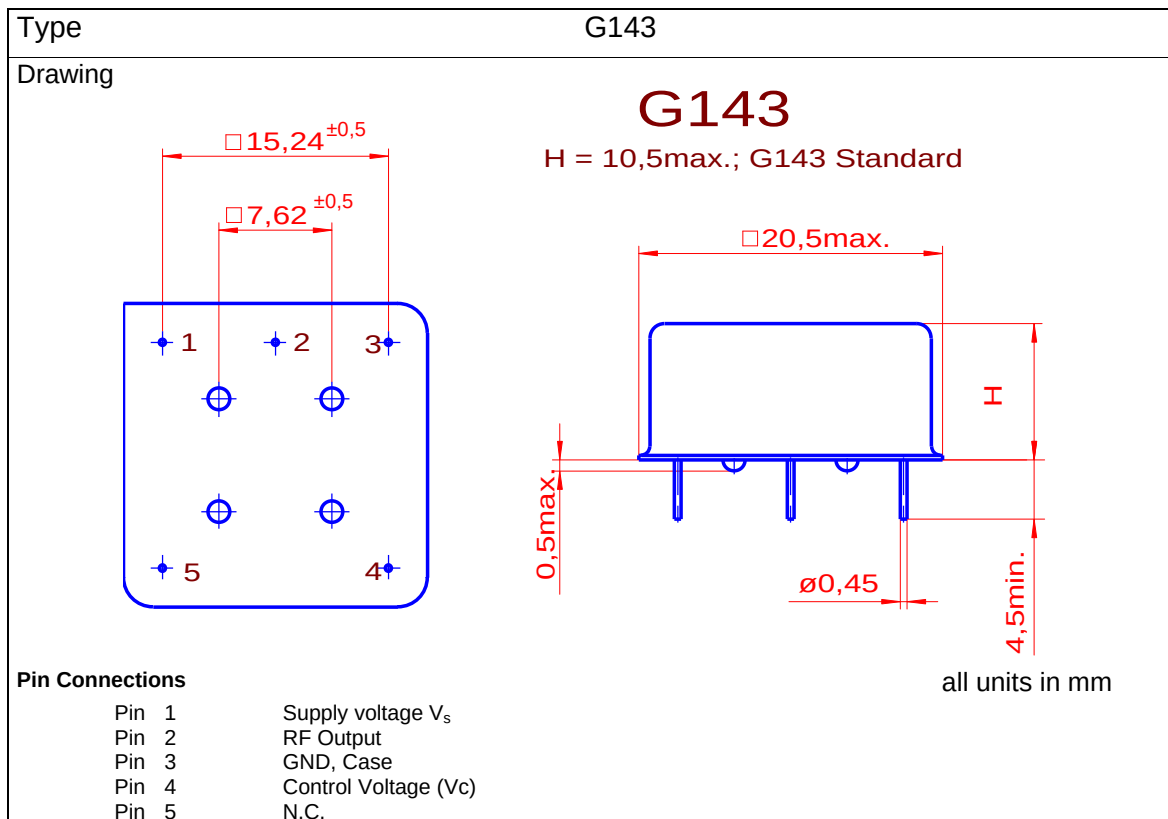
Supply Voltage

Parameter	Value	Condition
Supply voltage (V_S)	5.0 V $\pm 5\%$	
Power consumption steady state	< 1.0 W	@ 25°C
During warm up	< 2.5 W	

Additional parameters

Parameter	Value	Condition
Phase Noise	< -60 dBc/Hz < -90 dBc/Hz < -120 dBc/Hz < -140 dBc/Hz < -145 dBc/Hz < -150 dBc/Hz	1 Hz 10 Hz 100 Hz 1 kHz 10 kHz 100 kHz Note 1
Weight	< 8 g	
Operable temperature range	-40 ... +90°C	
Storage temperature range	-55 ... +105°C	
Processing & Packing	handling&processing note	

Enclosure



Ordering Code	
Model	Frequency
Example: OCO50	10M000
Order: OCO50	

Note

- 1 Typical values @ 10 MHz

Unless otherwise stated all values are valid after warm-up time and refer to typical conditions for supply voltage, frequency control voltage, load, temperature (25°C)
Subject to technical modification; Not all options and codes are available at all Frequencies